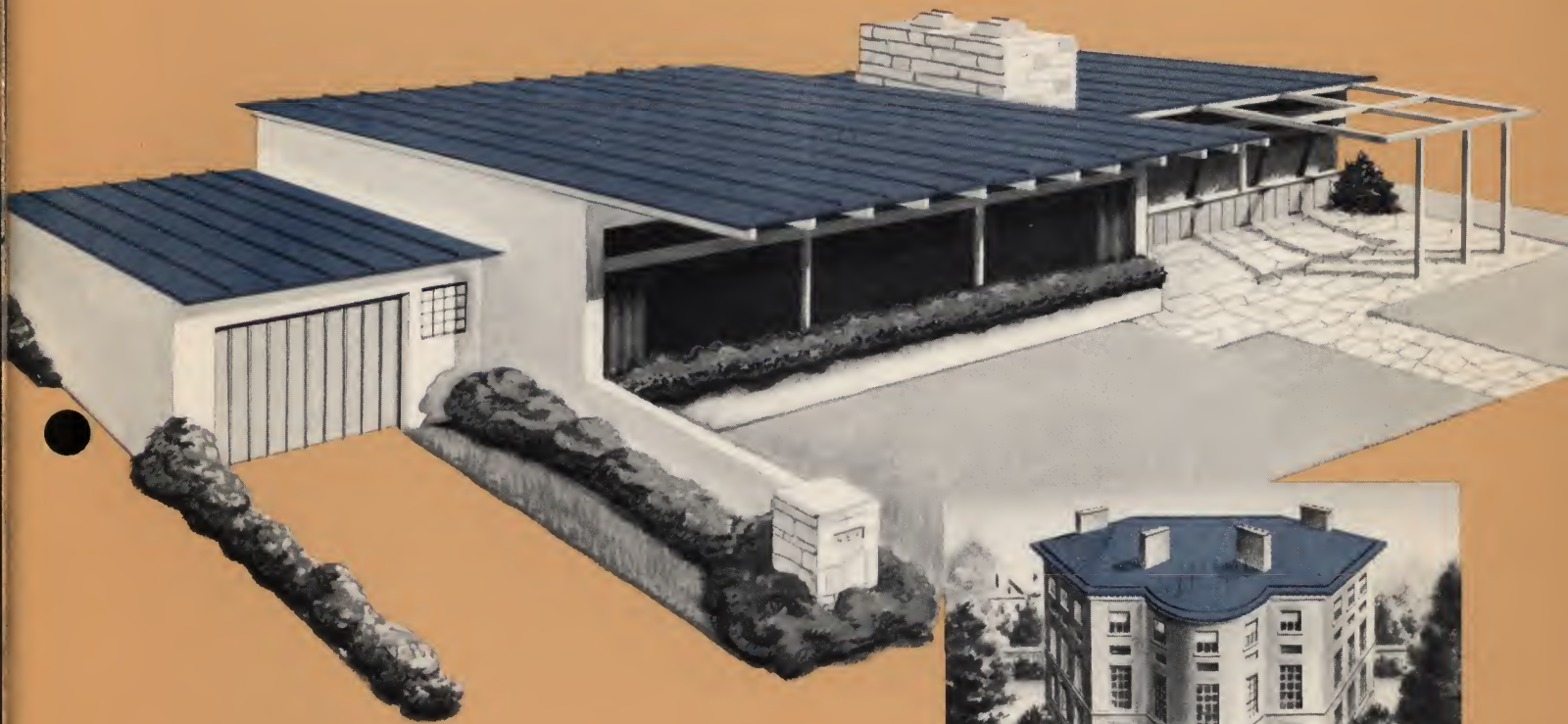


BEAUTY OF DESIGN AND COLOR

DEPENDABILITY OF PROTECTION

WITH **FOLLANSBEE TERNE METAL** roofing



NO OTHER ROOFING MATERIAL OFFERS SO MUCH

- for the Complete, All-Metal Roof of Life-Time Beauty
- for WEATHERSEALING All Types of Roofs



**FOLLANSBEE STEEL CORPORATION**

PITTSBURGH 30, PENNSYLVANIA



# FOLLANSBEE TERNE METAL

## FOR ROOFS OF LIFE-TIME BEAUTY



### ADVANTAGES

#### DESIGN POSSIBILITIES ARE UNLIMITED

- Permits designing the roof a true part of each individual structure
- Ideal for large and small roof areas
- Offers pleasing light and shadow patterns to relieve roof monotony
- Or strong shadow and box-like patterns for massive appearance
- For life time beauty of appearance

#### HARMONIOUSLY COLORFUL ROOFS

- Color is introduced with full freedom
- Permits complete color harmony from roof to foundation (and landscaping)
- Readily painted—and repainted—in any color
- Makes a good base for practically all paints
- Can be painted immediately upon application
- Requires *NO* special acid, sanding, or other metal treatment prior to painting

#### DEPENDABLE PROTECTION

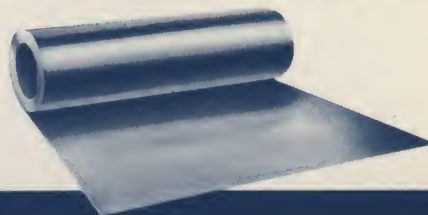
- The complete answer to the primary problem of providing full protection at the roof
- On any pitch roof, from vertical to very low pitch
- The perfect answer to the problem of drainage of low pitched roof areas
- The complete roof of one permanent material
- The ideal flashing and valley metal
- Sealed weathertightness for the life of the roof

#### DURABLE TROUBLE-FREE SERVICE

- The tensile strength of the steel base plate
- The high corrosion resistance of lead
- The tight bonding properties of tin
- The fire resistance of metal
- A very low coefficient of expansion
- Compatibility with all other metals to which it is joined

#### TRUE ECONOMY

- Easy to apply
- No expansion joints required
- Sufficiently light in weight to eliminate the need for special load-bearing sub-structures
- Trouble-free for the life of the building
- Relatively free of maintenance for life
- Comparatively low in initial cost
- Long-lasting satisfactory service means low annual roof cost



### PHYSICAL PROPERTIES

**SELECTED STEEL BASE**—Follansbee Terne Metal roofing is made of copper-bearing steel strip, heat treated to provide the best balance between malleability and toughness.

**THICKNESSES**—Two thicknesses of the base metal are available: (1) standard IC gage (approximately 0.0122" thick), which is widely used on all residential and most industrial and commercial Terne Metal roofs; and (2) IX gage (approximately 0.0155" thick), which is made on special order for extremely wide gutters and some industrial and commercial roofs where extra heavy base metal is required.

**TERNE-ALLOY COATING**—The base steel strip is coated with a lead-tin alloy by hot-dip method. The 40 lb. coating is the one recommended for roofing because the extra thick coating provides an additional margin of safety for a roof that can be expected to give efficient, trouble-free service for the life of the building. Also, available in 20-lb. coating for special applications.

**MILL FINISH**—Follansbee Terne Metal is supplied unpainted, painted one side, or painted both sides, as desired.

**DIMENSIONS**—Follansbee Terne Metal is furnished for roofing in 50 ft. seamless rolls in widths of 14", 20", 24", and 28". For weathersealing applications the 50 ft. rolls of Follansbee Terne Metal are available in widths of 4", 6", 7", 8", 10" and 12". Pre-cut flashings 5" x 7", IC gage, painted on both sides, are supplied in packages of 100.

**WEIGHT**—Follansbee Terne Metal is light in weight, averaging 70 lb. per square (100 square feet).

**TENSILE STRENGTH**—45,000 lbs. per square inch, as compared to 36,000 for zinc (across grain), 32,000 for copper, 27,000 for zinc (with grain), and 1,780 lb. per sq. in. for lead.

**COEFFICIENT OF EXPANSION**—Only 0.2195" per 30 lineal feet for each 100° F. temperature change. Thus no allowances or joints for expansion and contraction are required.

**OTHER FEATURES**—Follansbee Terne Metal is completely fireproof in itself and fire suppressive when properly applied. It is rugged, relatively free of maintenance (only needs an occasional painting) and easy to apply.



## TRADITIONAL STYLE OR CONTEMPORARY DESIGN

Architects and designers like the flexibility of Follansbee Terne Metal in meeting the design features of a structure, whether it is large or small, or in traditional or contemporary design. Three basic types of standard seams are commonly used: Standing Seam for graceful lines and interesting shadow patterns; Batten Seams for stronger shadow patterns and more massive appearance; and Flat Locked Seams for roof slopes of less than 2" per horizontal foot.

**PAINT THE ROOF ANY DESIRED COLOR**—It is not necessary to limit the color of a Terne Metal Roof to the traditional red iron oxide, which remains a good base paint or for use when color and design are not important. Today color can be introduced with freedom, using any high grade exterior house paint recommended for Terne Metal roofs (a list of paint manufacturers' recommendations available on request).

**ROOFS DO NOT GROW OLD**—Records of many of our old distinguished mansions, important public buildings and other fine structures show that they still have their original Terne Metal roofs laid a century and more ago. Follansbee Terne Metal roofing—given an occa-

sional coat of paint—won't grow old—it will age slowly over the coming century, but provide good protection for the life of the building it covers.

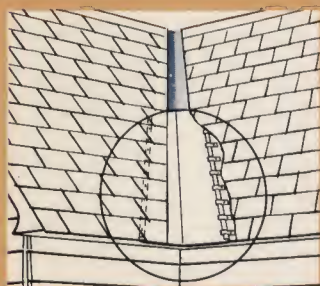
**PROOF AGAINST WEATHER AND FIRE**—Properly applied, Follansbee Terne Metal will be literally a solid blanket of metal, which will effectively seal out the elements. Being non-combustible in itself, Terne Metal not only retards roof-fires but provides a suppressive action by virtue of its airtight blanket.

**TROUBLE-FREE—LOW IN MAINTENANCE**—Once up, a Follansbee Terne Metal roof is up to stay, with but an occasional painting required. Proof of that can be found in the many stately old mansions, monumental public buildings, and other fine structures having Terne Metal roofs with service records up to a century and even more, including the famous Octagon building in Washington, D.C., headquarters of the American Institute of Architects.

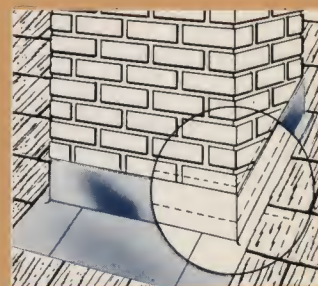
**EASY TO APPLY**—Follansbee Terne Metal is easy to install. Skilled metal roofing contractors have been applying Terne Metal roofs for many years and have evolved installation methods that have proven themselves over long periods of time.

### USE TERNE METAL FOR ROOF WEATHERSEALING, TOO

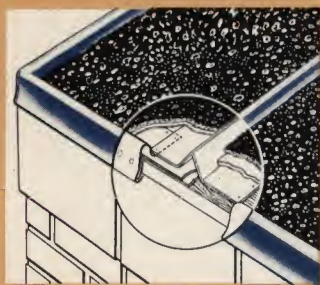
Known and used for the greater part of a century as "valley tin" and "roofer's tin", Follansbee Terne Metal is in great demand for valley and flashing work on all types of roofs, as well as for flashing doors and windows. It also offers the perfect answer to the drainage problem presented by low-pitched roofs, such as those which are characteristic of homes designed in the modern manner.



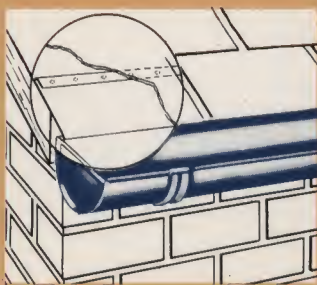
Valleys



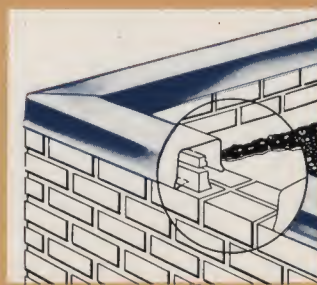
Continuous Chimney Flashing



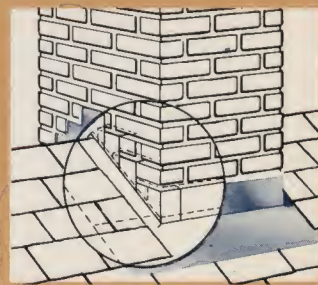
Gravel Stops and Expansion Joints



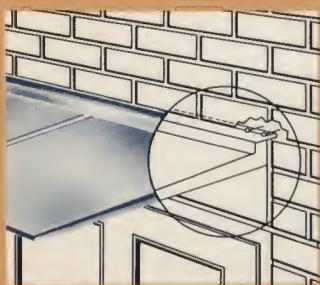
Eaves Trough



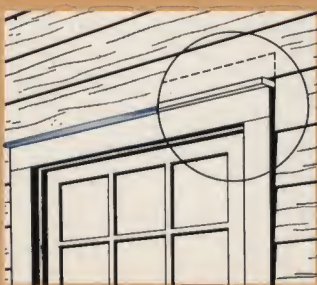
Copings for Parapet Walls



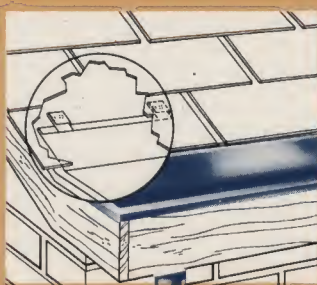
Step Chimney Flashings



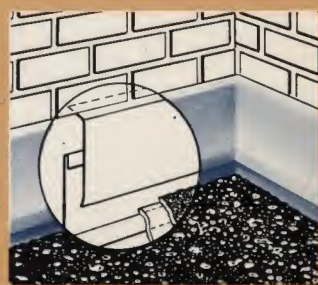
Canopies and Sun Shades



Window and Door Flashings



Built-in Gutters



Wall or Parapet Flashing



## TYPES OF TERNE METAL ROOFS

**STANDING SEAM**—Double locked, unsoldered seams which stand up about one inch from the surface of the roof.

**BATTEN (RIBBED) SEAM**—Vertical battens are nailed to the sheathing, and both sheathing and battens are covered with Terne Metal.

**FLAT LOCKED SEAM** Seams are turned over malleted flat to the roof, and the joints well soaked with solder.

## TYPICAL SPECIFICATIONS

These specifications cover the three standard types of Terne Metal roofs—standing seam, flat locked seam, and batten (ribbed) seam. When the following is included in the architect's roofing specifications, he will obtain a properly applied Terne Metal roof of lasting quality. (For complete instructions, send for the bulletin "How to Install Follansbee Terne Metal Roofs.")

**GENERAL**—Follansbee Seamless Terne Metal Roofing (specify coating weight and width), embossed with brand name, shall cover all roof surfaces. All roofing shall be standard IC gage, unless otherwise noted.

Tight sheathing shall be firmly attached to the joists, with no projecting loose edges. Terne Metal roofing shall be installed on good quality Rosin sized paper previously laid on the tight sheathing.

Underside of each Terne Metal sheet shall be painted with a suitable primer coat recommended by paint manufacturer for that purpose, and thoroughly dried before sheet is laid. Painting of exposed surface of Terne roof shall be done according to instructions contained in Bulletin "How to Paint Follansbee Terne Metal Roofs." Two coats of paint shall be applied. All painting shall be included in roofing contract.

The Terne Metal shall be held in place by Terne Metal cleats, placed not more than 12" apart. Cleats shall be not less than 1½" wide; part of cleat in contact with roof shall be approximately 2" long, with the turned-up portion as required for specified seam. Each cleat shall be held in place by one 14-gage wire staple or two ⅞" roofing nails placed close to bend in cleat. End of flat portion of cleat shall be folded back over staple or nail heads and malleted flat.

Cross seams, when unavoidable, shall be single locked soldered joints, staggered to avoid extra thicknesses in finished vertical seams, made according to water flow—upslope strips shall *always* overlap downslope strips on roof.

All solder used shall be strictly half-and-half. Only acid-free soldering fluxes shall be used. All excess flux shall be removed from seams before painting.

Roofers shall wear rubber-soled shoes or rubber overshoes. Unnecessary walking and the storage of other materials on roof shall be avoided.

All roofing and painting workmanship shall be guaranteed for *one year*.

**STANDING SEAM**—(Standing seam roof may be specified when pitch is 2" or more per horizontal foot. If pitch is less, flat locked seam roof must be specified).

All provisions of "General Specifications" shall apply.

Standing seams shall be double locked and tightly pressed together. Finished seams shall be 1" high, free from kinks and curves, square with ridge comb, and show straight lines when sighted from edge of roof.

Ridgecomb shall be finished with (1) standing seam, or (2) seamless, or (3) flat locked seam, as desired.

**BATTEN (RIBBED) SEAM**—In general, a batten seam roof may be specified when pitch is 2" or more per foot. If pitch is less, flat locked seam roof should be specified. If higher battens are used, however, roof pitch may be less. A batten 1" high provides a seam comparable to standing seam, therefore a batten 2" high will give a higher seam, and the pitch may be less than 2" per foot.

All provisions of "General Specifications" shall apply.

Solid wooden battens (Size) by (Size) shall be used. (Size of battens should be determined by roof area, height from ground, and pitch of roof. Small battens—1" to 1½" square—may be applied to a very small roof area or the roof on a low building, but this question must be decided by the architect only after very careful consideration of all factors that may influence use of battens. Height, width and spacing of battens should be specified to obtain the desired appearance.)

Battens shall be spaced (Inches) apart. For economy and fast installation, space between battens (not between centers) should be width of any standard Follansbee Seamless Terne Metal Roofing roll, less twice height of battens, less 1". Example: Terne roll 24" wide, batten 1½" high by 2" wide—space between battens (not between centers) then will be 24" (width of roll), less 3" (twice height of battens), less 1" (for locking batten caps) or 20".

Ridge seam batten shall be (.....). (Ridge may be finished in any one of a variety of seams, or it may be finished seamless).

**FLAT LOCKED SEAM**—(Flat locked seam roof should be specified when pitch is less than 2" per foot. If pitch is greater, standing seam or batten (ribbed) seam roof may be specified.)

All provisions of "General Specifications" shall apply.

Flat locked seams shall be single locked, malleted down flat, avoiding buckling of strips, and soaked well with solder. Finished seams *must be flat* and only as high as multiple thicknesses of Terne Metal require.



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PITTSBURGH 30, PENNSYLVANIA



## TYPES OF TERNE METAL ROOFS

**STANDING SEAM**—Double locked, unsoldered seams which stand up about one inch from the surface of the roof.

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**FLAT LOCKED SEAM** Seams are turned over malleted flat to the roof, and the joints well soaked with solder.

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